

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 619 983 A3

(12)

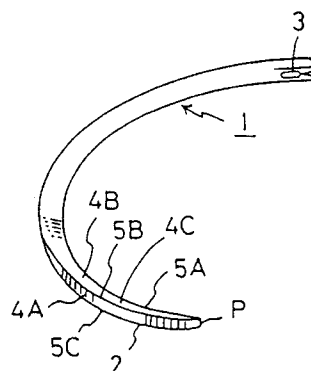
EUROPEAN PATENT APPLICATION(21) Application number: **94300987.8**(51) Int. Cl.⁶: **A61B 17/06**, B24B 19/00,
B21G 1/00, B24B 19/16,
B24B 41/06(22) Date of filing: **10.02.94**(30) Priority: **15.04.93 JP 111155/93**(43) Date of publication of application:
19.10.94 Bulletin 94/42(84) Designated Contracting States:
DE FR GB(88) Date of deferred publication of the search report:
31.05.95 Bulletin 95/22(71) Applicant: **KABUSHIKI KAISHA MATSUTANI
SEISAKUSHO
743 Ouaza,
Naka-Akutsu,
Takanezawa-Cho,
Shioya-Gun
Tochigi-Ken (JP)**(72) Inventor: **Matsutani, Kanji**

**743, Ouaza Naka-Akutsu,
Takanezawa-Cho
Shioya-Gun,
Tochigi-Ken (JP)**
Inventor: **Yagisawa, Hiroshi**
**743, Ouaza Naka-Akutsu,
Takanezawa-Cho
Shioya-Gun,
Tochigi-Ken (JP)**
Inventor: **Saitoh, Akira**
**743, Ouaza Naka-Akutsu,
Takanezawa-Cho
Shioya-Gun,
Tochigi-Ken (JP)**

(74) Representative: **Pattullo, Norman et al
Murgitroyd and Company
373 Scotland Street
Glasgow G5 8OA (GB)**(54) **Surgical needle and apparatus for grinding the same.**

(57) A surgical needle (1) for sutural treatment having a body (2) triangle or polygon in cross section includes a blunt needle point (P) with a plate or round end and at least two cutting edges (5B,5C) to prevent a health provider from hurting herself or himself by mistake even if the needle (1) contacts the tissues of the health provider and to provide a property that once the needle (1) enters the tissues the needle (1) passes through the tissues smoothly. A first face (4A) of the body (2) could be ground by a grinding apparatus (20) specially made for the surgical needle (1) to form a tapered slope and the cutting edges (5B,5C). Pressing a material piece of the needle in a V-shaped groove (11) forms second and third faces (4B,4C) and readily produces a high quality surgical needle (1).

FIG - 1

**EP 0 619 983 A3**



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 94 30 0987

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
Y	WO-A-92 08412 (MCINTOSH) * page 1, line 3 - page 2, line 20; claims; figures * ---	1,2,4,5, 7,8	A61B17/06 B24B19/00 B21G1/00 B24B19/16 B24B41/06
Y	DE-A-34 34 218 (ETHICON INC) * page 10, line 31 - page 13, line 19; figures * ---	1,2,4,5, 7,8	
A	EP-A-0 453 132 (MATSUTANI SEISAKUSHO CO LTD) * claims; figures *	1,2,4,8	
A	PATENT ABSTRACTS OF JAPAN vol. 013 no. 494 (C-651) ,8 November 1989 & JP-A-01 195892 (MATSUTANI SEISAKUSHO CO LTD) 7 August 1989, * abstract * ---	1,2,4,6	
A	US-A-5 064 411 (GORDON III) * column 5, line 15 - line 62; figures 5-8 * -----	1,7	TECHNICAL FIELDS SEARCHED (Int.Cl.5) A61B B24B B21G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 March 1995	Examiner Douskas, K
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			